CRF Processing Date: 12/17/2001
Edited by: _____
Verified by: _____ (STIC sta[

Serial Number: 10/003,608

ENTERED

#2

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically: _____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____

☑ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included: _____

☐ Deleted extra, invalid, headings used by an applicant, specifically: _____

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically: _____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically: _____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☑ Other: deleted duplicate <2217 - <2237 responses

_____

_____

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

#2 OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION:  US/10/003,608

DATE: 12/17/2001
TIME: 20:15:46

Input Set : **A:\PTO.AMC.TXT**
Output Set: **N:\CRF3\12172001\J003608.raw**

PS

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  4 <110> APPLICANT: Bartha, Gabor
  5        Walker, Michael
  7 <120> TITLE OF INVENTION: METHODS FOR ANALYZING GENE EXPRESSION PATTERNS
 10 <130> FILE REFERENCE: ICYTP012
 12 <140> CURRENT APPLICATION NUMBER: US/10/003,608
 12 <141> CURRENT FILING DATE: 2001-11-01
 12 <150> PRIOR APPLICATION NUMBER: 60/245,081
 13 <151> PRIOR FILING DATE: 2000-11-01
 15 <160> NUMBER OF SEQ ID NOS: 30
 17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 4588
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Human
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 27 tcctgccttg accaggactt gggactttgc gaaaggatcg cggggcccgg agaggtaacc 180
 28 gccgcgcctc cggagaggt gttggagagc acaatggctg aacaagtcct tcctcaggct 240
 29 ttgtatttga gcaatatgcg gaaagctgtg aagatacggg agagaactcc agaagacatt 300
 30 tttaaaccta ctaatgggat cattcatcat tttaaaacca tgcaccgata cacactggaa 360
 31 atgttcagaa cttgccagtt ttgtcctcag tttcgggaga tcatccacaa agccctcatc 420
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 33 cggaagcttg tggcgctgaa aacgaacggt gacggcaatt gcctcatgca tgccacttct 540
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 35 ctcaaggaaa cagacacacg caactttaaa ttccgctggc aactggagtc tctcaaatct 660
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 37 aatcttatca aaatggcttc cacagacaca cccatggccc gaagtggact tcagtacaac 780
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 39 atttcagaca aaatgctaag aagtttggaa tcaggttcca atttcgcccc tttgaaagtg 900
 40 ggtggaattt acttgcctct ccactggcct gcccaggaat gctacagata ccccattgtt 960
 41 ctcggctatg acagccatca ttttgtaccc ttggtgaccc tgaaggacag tgggcctgaa 1020
 42 atccgagctg ttccacttgt taacagagac cggggaagat ttgaagactt aaaagttcac 1080
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 54 ccagaccaca caaggcactt ggatcccggg aagtgccaag cctgcctcca ggatgttacc 1800
 55 aggacattta atgggatctg cagtacttgc ttcaaaagga ctacagcaga ggcctcctcc 1860
 56 agcctcagca ccagcctccc tccttcctgt caccagcgtt ccaagtcaga tccctcgcgg 1920
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12/17/01

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/003,608

DATE: 12/17/2001
TIME: 20:15:46

Input Set : A:\PTO.AMC.TXT
Output Set: N:\CRF3\12172001\J003608.raw

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 59 gccggctgcg tgtattttgg gactccagaa aacaagggct tttgcacact gtgtttcatc 2100
 60 gagtacagag aaaacaaaca ttttgctgct gcctcaggga aagtcagtcc cacagcgtcc 2160
 61 aggttccaga acaccattcc gtgcctgggg agggaatgcg gcacccttgg aagcaccatg 2220
 62 tttgaaggat actgccagaa gtgtttcatt gaagctcaga atcagagatt tcatgaggcc 2280
 63 aaaaggacag aagagcaact gagatcgagc cagcgcagag atgtgcctcg aaccacacaa 2340
 64 agcacctcaa ggcccaagtg cgcccgggcc tcctgcaaga acatcctggc ctgccgcagc 2400
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 67 tttggcaatg ccaagtgcaa cggctactgc aacgaatgct ttcagttcaa gcagatgtat 2580
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 71 ggagtgttcc caggtggcct tagaaagcaa agcttgtaac tggcaaggga tgatgtcaga 2820
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 77 tcatggtttt tccctacctg cccggttcct ttcctgagga cccggcagaa atgcagaacc 3180
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 82 tgaaatgctg ccctagaagt acaataggaa ggctaaataa taataacctg ttttctggtt 3480
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 97 caaagatacc aaataaactt cagtgttttc atctaattct cttaaagttg atatcttaat 4380
 98 attttgtgtt gatcattatt ccattctta atgtgaaaaa aagtaattat ttatacttat 4440
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104 <211> LENGTH: 790
105 <212> TYPE: PRT
106 <213> ORGANISM: Human
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Input Set : A:\PTO.AMC.TXT
Output Set: N:\CRF3\12172001\J003608.raw

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112          20                  25                  30
113 Thr Asn Gly Ile Ile His His Phe Lys Thr Met His Arg Tyr Thr Leu
114          35                  40                  45
115 Glu Met Phe Arg Thr Cys Gln Phe Cys Pro Gln Phe Arg Glu Ile Ile
116      50                  55                  60
117 His Lys Ala Leu Ile Asp Arg Asn Ile Gln Ala Thr Leu Glu Ser Gln
118 65                  70                  75                  80
119 Lys Lys Leu Asn Trp Cys Arg Glu Val Arg Lys Leu Val Ala Leu Lys
120                  85                  90                  95
121 Thr Asn Gly Asp Gly Asn Cys Leu Met His Ala Thr Ser Gln Tyr Met
122              100                 105                 110
123 Trp Gly Val Gln Asp Thr Asp Leu Val Leu Arg Lys Ala Leu Phe Ser
124          115                 120                 125
125 Thr Leu Lys Glu Thr Asp Thr Arg Asn Phe Lys Phe Arg Trp Gln Leu
126      130                 135                 140
127 Glu Ser Leu Lys Ser Gln Glu Phe Val Glu Thr Gly Leu Cys Tyr Asp
128 145                 150                 155                 160
129 Thr Arg Asn Trp Asn Asp Glu Trp Asp Asn Leu Ile Lys Met Ala Ser
130              165                 170                 175
131 Thr Asp Thr Pro Met Ala Arg Ser Gly Leu Gln Tyr Asn Ser Leu Glu
132              180                 185                 190
133 Glu Ile His Ile Phe Val Leu Cys Asn Ile Leu Arg Arg Pro Ile Ile
134          195                 200                 205
135 Val Ile Ser Asp Lys Met Leu Arg Ser Leu Glu Ser Gly Ser Asn Phe
136      210                 215                 220
137 Ala Pro Leu Lys Val Gly Gly Ile Tyr Leu Pro Leu His Trp Pro Ala
138 225                 230                 235                 240
139 Gln Glu Cys Tyr Arg Tyr Pro Ile Val Leu Gly Tyr Asp Ser His His
140              245                 250                 255
141 Phe Val Pro Leu Val Thr Leu Lys Asp Ser Gly Pro Glu Ile Arg Ala
142              260                 265                 270
143 Val Pro Leu Val Asn Arg Asp Arg Gly Arg Phe Glu Asp Leu Lys Val
144          275                 280                 285
145 His Phe Leu Thr Asp Pro Glu Asn Glu Met Lys Glu Lys Leu Leu Lys
146      290                 295                 300
147 Glu Tyr Leu Met Val Ile Glu Ile Pro Val Gln Gly Trp Asp His Gly
148 305                 310                 315                 320
149 Thr Thr His Leu Ile Asn Ala Ala Lys Leu Asp Glu Ala Asn Leu Pro
150              325                 330                 335
151 Lys Glu Ile Asn Leu Val Asp Asp Tyr Phe Glu Leu Val Gln His Glu
152          340                 345                 350
153 Tyr Lys Lys Trp Gln Glu Asn Ser Glu Gln Gly Arg Arg Glu Gly His
154          355                 360                 365
155 Ala Gln Asn Pro Met Glu Pro Ser Val Pro Gln Leu Ser Leu Met Asp
156      370                 375                 380
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RAW SEQUENCE LISTING
PATENT APPLICATION:   US/10/003,608

DATE:  12/17/2001
TIME:  20:15:46

Input Set : **A:\PTO.AMC.TXT**
Output Set: **N:\CRF3\12172001\J003608.raw**

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158 385                 390             395             400
159 Gln Pro Leu Cys His Glu Cys Ser Glu Arg Arg Gln Lys Asn Gln Asn
160             405             410             415
161 Lys Leu Pro Lys Leu Asn Ser Lys Pro Gly Pro Glu Gly Leu Pro Gly
162             420             425             430
163 Met Ala Leu Gly Ala Ser Arg Gly Glu Ala Tyr Glu Pro Leu Ala Trp
164         435             440             445
165 Asn Pro Glu Glu Ser Thr Gly Gly Pro His Ser Ala Pro Pro Thr Ala
166     450             455             460
167 Pro Ser Pro Phe Leu Phe Ser Glu Thr Thr Ala Met Lys Cys Arg Ser
168 465             470             475             480
169 Pro Gly Cys Pro Phe Thr Leu Asn Val Gln His Asn Gly Phe Cys Glu
170             485             490             495
171 Arg Cys His Asn Ala Arg Gln Leu His Ala Ser His Ala Pro Asp His
172         500             505             510
173 Thr Arg His Leu Asp Pro Gly Lys Cys Gln Ala Cys Leu Gln Asp Val
174         515             520             525
175 Thr Arg Thr Phe Asn Gly Ile Cys Ser Thr Cys Phe Lys Arg Thr Thr
176     530             535             540
177 Ala Glu Ala Ser Ser Ser Leu Ser Thr Ser Leu Pro Pro Ser Cys His
178 545             550             555             560
179 Gln Arg Ser Lys Ser Asp Pro Ser Arg Leu Val Arg Ser Pro Ser Pro
180             565             570             575
181 His Ser Cys His Arg Ala Gly Asn Asp Ala Pro Ala Gly Cys Leu Ser
182         580             585             590
183 Gln Ala Ala Arg Thr Pro Gly Asp Arg Thr Gly Thr Ser Lys Cys Arg
184         595             600             605
185 Lys Ala Gly Cys Val Tyr Phe Gly Thr Pro Glu Asn Lys Gly Phe Cys
186     610             615             620
187 Thr Leu Cys Phe Ile Glu Tyr Arg Glu Asn Lys His Phe Ala Ala Ala
188 625             630             635             640
189 Ser Gly Lys Val Ser Pro Thr Ala Ser Arg Phe Gln Asn Thr Ile Pro
190             645             650             655
191 Cys Leu Gly Arg Glu Cys Gly Thr Leu Gly Ser Thr Met Phe Glu Gly
192         660             665             670
193 Tyr Cys Gln Lys Cys Phe Ile Glu Ala Gln Asn Gln Arg Phe His Glu
194         675             680             685
195 Ala Lys Arg Thr Glu Glu Gln Leu Arg Ser Ser Gln Arg Arg Asp Val
196     690             695             700
197 Pro Arg Thr Thr Gln Ser Thr Ser Arg Pro Lys Cys Ala Arg Ala Ser
198 705             710             715             720
199 Cys Lys Asn Ile Leu Ala Cys Arg Ser Glu Glu Leu Cys Met Glu Cys
200             725             730             735
201 Gln His Pro Asn Gln Arg Met Gly Pro Gly Ala His Arg Gly Glu Pro
202             740             745             750
203 Ala Pro Glu Asp Pro Pro Lys Gln Arg Cys Arg Ala Pro Ala Cys Asp
204         755             760             765
205 His Phe Gly Asn Ala Lys Cys Asn Gly Tyr Cys Asn Glu Cys Phe Gln
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     208 785                     790
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     212 <211> LENGTH: 1224
     213 <212> TYPE: DNA
     214 <213> ORGANISM: Human
     216 <220> FEATURE:
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     218 <222> LOCATION: 36, 91, 645, 655, 660, 671, 672
     219 <223> OTHER INFORMATION: n = A,T,C or G
     221 <221> NAME/KEY: allele
     222 <222> LOCATION: (0)...(0)
     224 <400> SEQUENCE: 3
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W--> 226 caaccatgca taaaaggggt tcgccgttct nggagagcca cagagcccgg gccacaggca 120
     227 gctccttgcc agctcttcct ctcctctcac agccgccaga cccgcctgct gagcccccat 180
     228 ggcccgcgct gctctctccg ccgcccccag caatccccgg ctcctgcgag tggcgctgct 240
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     231 ggtgaagtcc cccggacccc actgcgccca aaccgaagtc atagccacac tcaagaatgg 420
     232 gcagaaagct tgtctcaacc ccgcatcgcc catggttaag aaaatcatcg aaaagatgct 480
     233 gaaaaatggc aaatccaact gaccagaagg aaggaggaag cttattggtg gctgttcctg 540
     234 aaggaggccc tgcccttaca ggaacagaag aggaaagaga gacacagctg cagaggccac 600
W--> 235 ctgggattgc gcctaatgtg tttgagcatc acttaggaga aggcnccgat taatnaattn 660
W--> 236 attaatttat nnattggttg gttttagaag attctatgtt aatattttat gtgtaaaata 720
     237 aggttatgat tgaatctact tgcacactct cccattatat ttattgttta ttttaggtca 780
     238 aacccaagtt agttcaatcc tgattcatat ttaatttgaa gatagaaggt ttgcagatat 840
     239 tctctagtca tttgttaata tttcttcgtg atgacatatc acatgtcagc cactgtgata 900
     240 gaggctgagg aatccaagaa aatggccagt aagatcaatg tgacggcagg gaaatgtatg 960
     241 tgtgtctatt ttgtaactgt aaagatgaat gtcagttgtt atttattgaa atgatttcac 1020
     242 agtgtgtggt caacatttct catgttgaag ctttaagaac taaaatgttc taaatatccc 1080
     243 ttggacattt tatgtctttc ttgtaaggca tactgccttg tttaatgtta attatgcagt 1140
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     248 <211> LENGTH: 107
     249 <212> TYPE: PRT
     250 <213> ORGANISM: Human
     252 <400> SEQUENCE: 4
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     256             20                  25                  30
     257 Ala Gly Ala Pro Leu Ala Thr Glu Leu Arg Cys Gln Cys Leu Gln Thr
     258         35                  40                  45
     259 Leu Gln Gly Ile His Leu Lys Asn Ile Gln Ser Val Lys Val Lys Ser
     260     50                  55                  60
     261 Pro Gly Pro His Cys Ala Gln Thr Glu Val Ile Ala Thr Leu Lys Asn
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Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding
explanation is presented in the <220> to <223> fields of
each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION:  US/10/003,608

DATE: 12/17/2001
TIME: 20:15:47

Input Set : A:\PTO.AMC.TXT
Output Set: N:\CRF3\12172001\J003608.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:476 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11